

## Claims

1. A simulated fuel element for a fuel effect fire comprising:  
a body of material having at least a first part of its external surface,  
5 which is visible when the simulated fuel element is in its intended position  
of use, shaped and coloured to resemble a real fuel element;  
wherein the body of material comprises a rigid substantially non-  
transparent foam material.
- 10 2. A simulated fuel element as claimed in claim 1 wherein the body of  
material comprises a polyurethane foam.
3. A simulated fuel element as claimed in claim 1 or 2 comprising at least  
one region having a dark-coloured and light-reflecting surface.
- 15 4. A simulated fuel element as claimed in claim 3 wherein the dark coloured  
surface is black and/or mid to dark brown.
5. A simulated fuel element as claimed in claim 3 or 4 wherein the light  
20 reflecting surface comprises a coating material selected from a lacquer,  
varnish or gloss paint applied to the surface of the simulated fuel  
element.
6. A simulated fuel element as claimed in any of claims 3 to 5 wherein said  
25 dark coloured surface is a non-planar surface.
7. A simulated fuel element as claimed in any of claims 3 to 6 wherein said  
dark coloured surface is a rough or irregular surface.

8. A simulated fuel element as claimed in any of claims 3 to 7 comprising a crevice, cleft, fissure or the like extending towards the interior of the fuel element from an external surface thereof.
- 5 9. A simulated fuel element as claimed in claim 8 wherein a said region having a dark coloured surface is provided on an internal surface of said crevice, cleft or fissure.
10. A simulated fuel element as claimed in claim 9 wherein further comprising  
10 at least one cut-out, passage or channel extending from a surface thereof not visible in use into said crevice, cleft or fissure.
11. A simulated fuel element as claimed in claim 10 wherein said at least one  
15 cut-out or channel terminates at a point in said crevice, cleft or fissure which is not visible when the fuel element is in its intended position of use.
12. A simulated fuel element as claimed in any preceding claim comprising at  
20 least one internal cavity having an open face on a side of said element not visible when the fuel element is in its intended position of use and defining a wall region between said cavity and an area of the surface of the element which is visible in use, said wall region having a thickness sufficiently small that it is partially translucent to light incident on the wall region.
- 25 13. A simulated fuel element as claimed in any preceding claim further comprising pieces of reflective material applied to an external surface thereof.
- 30 14. A simulated fuel element as claimed in any of claims 3 to 12 further comprising pieces of reflective material applied to an external surface

thereof, said pieces being positioned to reflect light onto said at least one region having a dark-coloured and light-reflecting surface.

- 15.A simulated fuel effect fire including a fuel bed and a light source located  
5 below the fuel bed, the fuel bed comprising:
- i. an ember bed; and
  - ii. at least one fuel element mounted on the ember bed and comprising  
a body of material having at least a first part of its external surface,  
which part is visible when the simulated fuel element is so mounted,  
10 shaped and coloured to resemble a real fuel element, wherein the  
body of material comprises a rigid substantially non-transparent foam  
material.
- 16.A simulated fuel effect fire as claimed in claim 15 wherein the body of  
15 material comprises a polyurethane foam.
- 17.A simulated fuel effect fire as claimed in claim 15 or 16 wherein the fuel  
element comprises at least one region having a dark-coloured and light-  
reflecting surface on which light from the light source is directly or  
20 indirectly incident.
- 18.A simulated fuel effect fire as claimed in claim 17 wherein the dark  
coloured surface is black and/or mid to dark brown.
- 25 19.A simulated fuel effect fire as claimed in claim 17 or 18 wherein the light  
reflecting surface comprises a coating material selected from a lacquer,  
varnish or gloss paint applied to the surface of the simulated fuel  
element.
- 30 20.A simulated fuel effect fire as claimed in claim 17, 18 or 19 wherein said  
dark coloured surface is a non-planar surface.

21. A simulated fuel effect fire as claimed in any of claims 17 to 20 wherein said dark coloured surface is a rough or irregular surface.
- 5 22. A simulated fuel effect fire as claimed in any of claims 17 to 21 wherein said fuel element comprises a crevice, cleft, fissure or the like extending towards the interior of the fuel element from an external surface thereof.
- 10 23. A simulated fuel effect fire as claimed in claim 22 wherein said fuel element further comprises at least one cut-out, passage or channel extending from a surface thereof not visible when the fuel element is mounted on the ember bed into said crevice, cleft or fissure through which cut-out, passage or channel light from the light source may pass into said crevice, cleft or fissure.
- 15 24. A simulated fuel effect fire as claimed in claim 23 wherein light passing through said cut-out, passage or channel is incident on a said dark coloured surface of the fuel element.
- 20 25. A simulated fuel effect fire as claimed in claim 23 or 24 wherein light passing through said cut-out, passage or channel is incident on a said dark coloured surface of a further fuel element mounted above said crevice, cleft or fissure.
- 25 26. A simulated fuel effect fire as claimed in any of claims 23 to 25 wherein said at least one cut-out, passage or channel terminates at a location in said crevice, cleft or fissure which is not visible when the fuel element is in its intended position of use.

27. A simulated fuel effect fire as claimed in any of claims 15 to 26 wherein the ember bed comprises at least one hole or substantially transparent area for the passage of light from the light source.
- 5 28. A simulated fuel effect fire as claimed in claim 27 wherein a coloured filter is provided in the path of light through said hole or substantially transparent area.
- 10 29. A simulated fuel effect fire as claimed in any of claims 15 to 28 wherein said fuel element comprises at least one internal cavity having an open face on a side of said element not visible when the fuel element is mounted on the ember bed and defining a wall region between said cavity and an area of the surface of the element which is visible in use, said wall region having a thickness sufficiently small that it is partially translucent to light from the light source directly or indirectly incident on the wall region.
- 15 30. A simulated fuel effect fire as claimed in claim 29 wherein said fuel element comprises at least one internal cavity having an open face disposed over a hole or substantially transparent area of the ember bed and defining a wall region between said cavity and an area of the surface of the element which is visible in use, said wall region having a thickness sufficiently small that it is partially translucent to light from the light source passing through a hole or transparent region of the ember bed.
- 20 31. A simulated fuel effect fire as claimed in claim 15 wherein the fuel element further comprises pieces of reflective material applied to an external surface thereof.
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32. A simulated fuel effect fire as claimed in claim 31 wherein said pieces of reflective material are so positioned that light from the light source is incident thereon.

5 33. A simulated fuel effect fire as claimed in any of claims 17 to 30 wherein the fuel element further comprises pieces of reflective material applied to an external surface thereof.

10 34. A simulated fuel effect fire as claimed in claim 33 wherein said pieces of reflective material are so positioned that light from the light source is incident thereon and is reflected onto said at least one region having a dark coloured and light reflecting surface.

15 35. A simulated fuel effect fire as claimed in any of claims 17 to 34 further comprising a reflective screen mounted behind the fuel bed whereby a reflection of the fuel bed may be observed in the reflective screen.

20 36. A simulated fuel effect fire as claimed in claim 35 wherein at least one dark-coloured and light-reflecting surface of a fuel element is arranged to face the reflective screen whereby a reflection of the said surface may be observed in the reflective screen.

37. A fuel element or a simulated fuel effect fire substantially as hereinbefore described with reference to any of Figures 1 to 7.